

DRAWING FROM MONTESSORI AND JENSEN'S BRAIN-BASED
LEARNING IN ADULT ESL FACTORY-BASED CLASSES

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1. Introduction

Some beginning adult learners of English as a Second Language (ESL) have difficulty learning English through typical classroom practices. This is especially true for those with a low level of education in their own language. Others may have a cognitive style (Gardner, 1983) that is not oriented to the typical classroom situation, with its strong focus on paper-based learning. I believe that an approach drawing on the work of Maria Montessori (2004) and Eric Jensen (2000, 2006) can be useful in addressing such issues.

Jensen's brain-based learning philosophy states that learning occurs because the brain strives to survive, and that learning occurs because the brain is challenged. Jensen's theories draw from research in brain chemicals which increase the growth of dendrites, which are synaptic connections in the brain. He claims that the more the brain is challenged, the greater the production of the chemicals which increase dendrite production, resulting in greater attention and retention (Jensen, 2000). This theory has encouraged to the use of kinesthetic activities and tactile materials in the classroom.

Montessori's philosophy was that every child can learn if the environment is properly prepared. Montessori placed emphasis on the learner as being the one who sets the pace for learning and that the classroom is learner-centered and not teacher-centered. The Montessori Method is typically used in Montessori schools for children ages three months through fifteen years and in a few Montessori high schools. There is little research which connects Montessori with adult education.

While it may seem odd that a Montessori approach designed for children can help adults, some basic modifications to key techniques actually coincide with Jensen's widely accepted brain-based approach. Indeed, such a multifaceted approach allows teachers of

adult learners to use new and fresh material that can actually enhance adult learning. Several of the methods used in Montessori satisfy the requirements of Jensen's brain-based learning, and others only need minor adaptations to meet the needs of adult English language learners.

The purpose of this paper is to show how the work of Montessori and Jensen can be adapted to deal with the specific problems that some non-native learners of English experience, drawing as well from my experiences teaching ESL in factory settings. Connections will also be made to language learning theorists Asher, Gattegno, Curran, and Lozanov.

2. Review of Literature

Below is a brief overview of several language teaching and learning theorists who have based their approaches on the same considerations which motivated Montessori's and Jensen's work.

The Montessori Method was developed by Maria Montessori in Rome, Italy to help the poor children of the city. Her interest in the plight of the poor children in the slums began during her medical career in a psychiatric clinic. After reading the works of Itard and Séguin, she felt that there must be a way to help these children (Wentworth, 1999). From this and her study of Itard's work with Victor the "wolf boy" (Otten, 1980), as well as her own observation of normal children, she formulated a plan which resulted in the opening of a school in 1907 (Hall, 1953). This plan developed into her philosophy that all children could learn depending on the environment. She felt that children had to be the conductors of their own education, meaning that the child learned at his/her own speed and in the areas that interested the child. Montessori was particularly interested in

combining motor skills and visuals into the teaching method. She took these two ideas and developed techniques for children which allowed them to work at their own pace. Those relevant to this paper are presented in section 3.

My research of the Montessori Method led me to a school to observe the method. The school has learners from the age of a few months through fifteen years old. The school is the Oak Farm Montessori School located in Avilla, Indiana. It was opened on January 24, 2000 with an enrollment of twenty. Today the enrollment is 140. My observations will appear throughout section 3 as they relate to the different aspects of ESL learners.

Eric Jensen is a former secondary education teacher who became interested in how the brain learned. He tried to discover the optimal conditions necessary for the brain to learn, which led him to neuroscience. He took this information and put it into practice in the classroom and found that learners were able to learn more effectively, if the conditions were optimally prepared according to the needs of the brain.

Jensen's research led him to compare the brain to a jungle, because in a jungle, the goal is survival. Jensen concluded that, "The brain is also best at learning what it needs to learn to survive – socially, economically, and physically," (Jensen, 2000, p. 2). His philosophy for brain-based learning is that "The brain is trying to learn in order to survive. And it can learn optimally in an environment that is conducive to how it learns best," (Jensen, 2000, p. 6). Jensen lists nine contexts or circumstances for learners which offer different learning styles to meet the requirements of different learners. These learning styles or contexts include: field dependent, field independent, flexible environment, structured environment, independent, dependent, interdependent,

relationship driven, content driven. Jensen's nine contexts and their relationship to the Montessori Method will be discussed in section 3 as they relate to ESL learners who have low levels of education in their own language.

Other theorists include James J. Asher, who developed the Total Physical Response (TPR) approach in the 1960's. Asher conducted experiments with children and adults in second language acquisition using his "language-body" language learning theory with success. What he claims is that hearing the word with an associated body movement facilitates learning for both adults and children. He concluded that "Not only is there immediate understanding of the strange noises coming from someone's mouth, but the patterning of the target language is internalized in such a way that he is able effortlessly to recognize constituents to understand novel sentences" (Asher, 1986, p. 1-30). He also noted that adults "matched the performance of children" (p 1-31) while using his TPR approach.

Through the use of TPR in adult ESL classrooms, adults are able to make physical connections to verbal utterances. These physical actions facilitate later recall of words in the new language. Physical activity also is utilized in Montessori and Jensen's brain-based learning to assist learners in acquiring new subject material.

Gattegno applies some of the same methodologies as Maria Montessori's Method in keeping the teacher in the background and not in center-stage. While the Montessori Method is tailored for use with native speakers, Gattegno applied the silent teacher way to foreign language teaching. His philosophy is stated in the phrase "the subordination of teaching" to learning (Gattegno, 1972, p. 1). This led to the name of "The Silent Way" for his particular application of teacher silence.

Gattegno employs “the notion of inner criteria,” (Gattegno, 1972, p. 29) which is the ability of learners to self-monitor. The learner does this through language lessons in which the learner has gleaned an understanding of the language system. The teacher in Gattegno’s Silent Way presents material in much the same manner as a Montessori teacher. The teacher in both of these approaches uses the minimum number of words necessary to present the lesson as well as using a controlled voice that is neither enthusiastic nor bored. By employing a neutral voice and a minimum number of words, the teacher makes the tactile material the center of attention for the learner.

Gattegno’s use of color for learning language is reminiscent of Montessori’s use of color. However, there are differences. Gattegno uses color for vocabulary building and sounds, while Montessori uses color in grammar and in math. Color association is a visual means by which learners are able to make connections to what is learned. This connection is available to learners because they can recall what was learned when they see the color.

The process for learning in Gattegno’s Silent Way is begun with the use of the color rods known as Cuisinaire rods. The teacher begins by showing a rod and saying “a rod,” followed by showing another and another and each time a rod is shown and placed on the table the teacher says “a rod.” The next step is to add color words resulting in phrases such as “a red rod,” “a blue rod,” etc. The class then is shown one of the rods and they are to respond with the correct phrase for that rod. The next step is for the verb *take* to be added to the three word phrase with the appropriate action followed by adding the phrase “give it to me” (Gattegno, 1972, p. 36) with appropriate hand gestures. The teacher demonstrates this and then the learners practice this with each other while the

teacher silently observes. During these silent observations, the teacher is noticing what type of problems and successes the learners are having and making note of what needs attention for the learners to make progress. The teacher silently observing the learners and making note of successes and problems is also one of the features of the Montessori Method. Gattegno notes that using the rods has helped “to create simple linguistic situations that are under the complete control of the teacher” (Gattegno, 1972, p. 37). The teacher is in complete control, but the teacher is not the center of attention. The learners are the ones speaking making them the center of attention.

Another interesting feature of the Silent Way is that Gattegno does not call a “mistake” a mistake. Instead, in his approach he throws the students “back onto themselves to elaborate further their criteria and to use them more completely” (Gattegno, 1972, p. 31). Earl W. Stevick interprets Gattegno’s view of the teacher’s choice of actions to a mistake as “(1) Remain silent if at all possible. (2) Give only as much help as absolutely necessary” (Stevick, 1974, p. 310). This is similar to the Montessori Method’s instructions to the teacher. Through these activities or lack of teacher input, the learners become independent and learn from their own errors creating the scaffolding necessary for learning to continue. This independence is also seen in Jensen’s context variable, independent.

Earl W. Stevick observed community building while he was working with Turkish instructors and the Silent Way; he writes: “the Silent Way gives primary attention to the social forces at work in the class” (Stevick, 1974, p. 306). The relaxed atmosphere created by the Silent Way builds a community in the classroom because the teacher is not the center of it. Community is also an aspect of Jensen’s brain-based

learning theories that allows the classroom to be learner-centered instead of teacher-centered.

Continuing examination into community leads to the work of Charles A. Curran, who was the developer of the Counseling-Learning approach. The term encompasses the fields of counseling and psychotherapy and integrates them into learning. Curran states that the “relationship is one that accepts and engages the whole person of both the learner and the teacher” (Curran, 1976, p. 2). This begins with the teacher (counselor) aiding the learner (client) in removing the stress of beginning the learning process of acquiring the new language. The learner progresses to the point that he feels independent, but may not have made as much progress as he/she thinks. The learner is now responsible to continue the process. The materials for continuing are available and it now becomes the responsibility of the learner to take the initiative to continue learning. When the learner reaches this point, he/she becomes an independent learner which is one of Jensen’s brain-based learning points. At this point, the learner may be able to select what the learner needs from the materials.

Curran’s Counseling-Learning approach is more commonly known as Community Language Learning in second language acquisition because it has “a very special kind of community-involvement” (Curran, 1976, p. 1). Curran describes it as “an intense atmosphere of warmth and belonging is produced which deeply relates each person not only to the teacher-knower but to everyone in the learning group” (p.1). Jensen’s brain-based learning approach also includes a community for optimal learning conditions to exist. It is within this atmosphere that the independent learner is enabled to select what he/she needs from the materials available.

Curran found that maximum learning occurs at a point where the learner's attention is piqued. This point is between something so new that the learner struggles to add it to the memory and the point of boredom because the learner already has that information in the memory. To achieve this, the teacher must offer a "total experience" (Curran, 1976). In the total experience, the teacher is assisting the learner through a period of affectiveness, helping the learner through the movement from one level to another. This is similar to what is seen in the Montessori Method when the teacher works with a learner on the acquisition of a new letter, or beginning reading or sentence analysis. It is not the relationship between the teacher and the learner that is emphasized, but the relationship between the learner and the material being learned.

In the Montessori Method, the teacher does not display any emotion, and Curran finds that this "indifference . . . proves often to be a form of defense against anxiety and fear of failure rather than resistance to learning" (Curran, 1976, p. 103). The lack of emotion on the teacher's part is reflected in the learners in the classroom. The learner's work and make mistakes or errors, which are signs that further work must be done before they master the lesson and are ready to progress. There is no display of frustration or anger, and the learner repeats the work at that time or places it back on the shelf to be brought out at another time.

Gattegno also included minimal praise or no praise at all in the Silent Way. The use of silence is in his approach as well as that of the Montessori Method and the work of Curran; yet, all three of these approaches achieve a controlled atmosphere in which anger and frustration are kept to a minimum. However, there may be another side to this that is not being discussed. This other side is that the learner who needs to have praise to feel

that he/she is making progress is not receiving the extrinsic motivation to continue the learning process.

The Community Language Learning by Curran is reminiscent of Lev Vygotsky's Zone of Proximal Development. Curran's and Vygotsky's description of the learner's progression from dependent to independent is similar. Mitchell and Meyers define ZPD as "the domain of knowledge or skill where the learner is not yet capable of independent functioning, but can achieve the desired outcome given relevant scaffolded help" (Mitchell & Myles, 2004, p. 196). The role of the teacher/counselor is to aid the learner to gain the knowledge and skill in the new language from the current level to the next through the social interactions occurring between the counselor/teacher and the client/learner.

Adair-Hauck and Donato describe Vygotsky's four levels of ZPD: 1) this initial level features the teacher as expert giving the student or novice explicit instruction or communicative direction in which the teacher is speaking the majority of the time; 2) "instructional mediation [construct] a bridge between very different and previously separate worlds" (Adair-Hauck & Donato, 1994, p. 543); 3) "the student is clearly taking on more responsibility for the activity since her definition of the situation now coincides with the teacher's" (Adair-Hauck & Donato, 1994, p. 544); the verbal exchange between the teacher and student are at a point where they are equal, and the student is moving toward self-regulation; 4) the student has moved into self-regulation and "is becoming her own coach" (Adair-Hauck & Donato, 1994, p. 545). The scaffolded help from the teacher/counselor can be replaced by the other learners in the class because of the community that has been established within the classroom.

The presence of music in a classroom can help to add to the community. Jensen writes that “frequent music playing will increase the pleasure of learners and give them the feeling that their classroom is a happy, pleasant place to be” (Jensen, 2000, p. 69). The Suggestopedia approach of Georgi Lozanov includes music. Lozanov preferred Baroque music because of the sixty beats per minute rhythm that matches most human heart beats. Lozanov’s approach is to create an atmosphere in which the learners are relaxed, which includes the use of cushioned armchairs. However, this atmosphere may be too relaxed for some students.

In my experience, the atmosphere needs to be comfortable but allow for enough variety for the learners to be at their peak attention. This can be done through the music that is played. I used different styles of music in my classrooms at the factories. The languages on the CD’s were English, Spanish, French or Greek. The style of the music varied with the language and some of the songs were slow and others were faster. An example of a CD that was well received by the learners was the CD *Almas del Silencio* by Ricky Martin. This particular CD contains songs that are fast and slow. They are alternated on the CD. The learners reported that this was beneficial because they were able to maintain their attention and feel comfortable. Music styles that the learners did not find comfortable were rap and heavy metal. The learners also had the opportunity to bring in music from their countries or music they wanted to listen to while working.

3. Brain-based learning and Eric Jensen

Brain-based learning emphasizes the need to offer different learning styles for all learners because learner preferences constantly change. This change is caused by internal and external influences which affect how learning will occur. Jensen has grouped these

into circumstances and calls them “context” (Jensen, 2000, p. 139). He writes that “the circumstances surrounding the learning provide important clues about what will happen during the learning. For example, how do your learners feel about the learning environment, social conditions, and the level of content difficulty?” (2000, p. 139).

These topics affect all learners, and adult ESL learners in particular who have had little or no education in their native language may benefit from a greater variety of styles than used in typical classrooms. Jensen’s nine contexts are discussed below.

3.1 Field Dependent

In Jensen’s context variables, field dependent learners “like to absorb their environment by interacting with it, exploring, touching, and observing” (Jensen, 2000, p. 140). Fieldtrips offer the brain one means of learning. Jensen states that “much of our learning happens in random, personalized, often complex patterns that defy description except in the most reductionist terms. In fact, the brain thrives on multi-path, multi-modal experiences,” (Jensen, 2000, p. 13). Fieldtrips are components of both Montessori and brain-based learning that are beneficial to all ages. Adult ESL learners as well as those younger benefit because they are able to observe, examine, and scrutinize the material in the real-life setting. This allows the learners to explore the different aspects that interest them. When they return to the classroom, these observations and other more closely examined material can be shared between the learners and everybody then has the opportunity to teach, this is a key component of the Montessori Method and the Brain-Based Approach.

In one of my ESL classes in the factories, the ESL students were learning about banking and the services available at these types of institutions. None of the learners

used banks because they were not familiar with them and lacked the vocabulary skills needed to communicate with the staff. After learning about savings and checking accounts in class, a field trip was arranged and the learners were able to see the way money was handled in a bank in the United States. This opportunity led to further interest in loans for automobiles and houses, which the learners were able to inquire about from the bank representative giving the tour and information session. The learners were given information about opening and maintaining checking accounts, savings accounts as well as information about credit/debit cards. Following the fieldtrip, all of the information they had been given was used in the class and balancing a checking account and a savings account became relevant because they now had plans to open accounts at one of the local banks.

Montessori felt that fieldtrips in the middle school years or ages twelve to fifteen were beneficial. However, she felt that learners in cities should be taken on field trips to historic sites and agricultural enterprises where they are able to participate in the daily operations of the farms or accompany a veterinarian on rounds (Lillard, 1996). Today, Montessori schools vary the fieldtrips they take. The Montessori school in Avilla took the eighth grade learners on a field trip to Stratford, Ontario, Canada to more closely understand *Macbeth* and the different styles of presentation as well as set building. Upon their return, the students began building the set for their play. The third grade class had taken a fieldtrip to watch and listen to the Fort Wayne Philharmonic Orchestra.

Other types of activities for the field dependent context variable would include experiments, and real-life situations. Experiments in adult ESL classrooms can include preparing a meal using a recipe from a cook book. Real-life situations are much easier,

as adult ESL learners are exposed to many different situations, such as needing to contact a doctor for an appointment, or even being able to call in sick to work and follow the procedures outlined in the company handbook. ESL learners with little or no education in their own language have difficulty understanding the procedure to complete the task. Thus, to aid adult ESL learners with this, I had the learners write down all of the information they needed to input into the telephone onto an index card before practicing it on the telephone brought in for that purpose. Some of the information had to be spoken and other parts had to be input on the touchpad of the telephone. After practicing this several times, the rate of no call and no show employees dropped significantly. To help the learners refresh the information, it was reviewed several times throughout the year.

The Montessori Method includes touching when using sandpapers letters; however, use of these is not necessary with most adult ESL learners. Although, adult ESL learners who have learning problems may benefit from using these letters because of the memory imprint that can be made on the muscles.

Field dependent ESL learners with learning problems and with no or low levels of education in their native language would benefit from Asher's TPR approach. This approach gives these adult ESL learners the physical examples they need to help them make the associations needed to build vocabulary. Jensen notes that movement aids the learners because "it enhances circulation so that neurons get more oxygen and nutrients" (Jensen, 2000, p. 167). TPR also fulfills part of Jensen's philosophy to include movement in the classroom.

3.2 Field Independent

This context variable does not require the teacher to schedule fieldtrips or

experiments that are hands-on types of experiences. Learners who are field independent are proficient and capable of identifying the goal of the lesson from available materials. If books, and other texts as well as computers or videos are available, the learner will sit, sort, and glean the appropriate information from these resources (Jensen, 2000).

Learners who use this learning style usually are good readers. Yet, it is not necessary to limit the use of materials such as those listed above to only those who are proficient readers. In adult ESL programs, there will be learners with varying reading abilities present. Thus, it becomes the responsibility of the teacher to find materials appropriate for each learner.

This learning style is utilized in both Jensen's brain-based learning and in the Montessori Method, because learners are not uniform in their knowledge and learning abilities. In the Montessori Method, the teacher has learners with different ability levels in the same classroom and this necessitates providing special materials that each of the levels will be able to use and benefit from.

In the Montessori school in Avilla, IN, Function of Words charts were available for the different levels of sentence structure. The chart contains colored shapes for each of the word classes. Two charts are part of the Montessori Method with a simpler chart for learners who are beginning writers and a chart containing more word classes for the more advanced writers. The sentence structure levels in the six to nine-year-old classroom stood out because both charts were posted on the wall. Those learners who were just beginning to write used the simpler structure guide, while the more advanced learners were able to use the more complicated structure, which was in line with their abilities. However, learners were not allowed to use the complicated sentence structure

until they had mastered the simple one.

Basic English sentence structure can be difficult for many beginning ESL learners, and the use of the didactic materials of the Montessori Method could assist these learners in the correct formation of a typical English sentence. Models for different sentence structures using the chart symbols could be made so that ESL learners could work alone or with others. Through the use of color and shapes for creating English sentences learners are accessing multiple channels for learning.

3.3 Flexible Environment

The environment in the classroom is an important element for learners as well as teachers. Learners come to ESL classes from different classroom settings, with the most common placing the teacher as the center of attention and the learners sitting and listening. ESL learners who enter classrooms where the learning is centered on them need time to adjust and adapt to the styles used in this setting. The approaches of TPR by Asher, The Silent Way by Gattegno, the Counseling-Learning or Community Language Learning approach of Curran, the Montessori Method and Jensen's brain-based learning are all learner-centered, and assistance from the teacher is present to help the learners make the transition to building a community that is learner-centered.

A flexible environment is precisely as it sounds, and learners who prefer this style do "well in a variety of environmental conditions" (Jensen, 2000, p. 141). The variables include: music and noise level; lighting; temperature; furniture and seating; and people. The Montessori Method includes many of the same physical aspects. Maria Montessori wrote about these in her books. Gerald Lee Gutek, editor of *The Montessori Method* by Maria Montessori, concluded that "Montessori's philosophy of education requires a

reformulation of the definition of a school. She defined a school as a prepared environment in which children are able to develop freely at their own pace, unimpeded in the spontaneous unfolding of their natural capacities,” (Montessori, 2004, p. 48). All of the above variables will be discussed throughout this section.

3.3.1 Sound: a combination of noise level and music

In a Montessori classroom, the tones of voice used by the teacher, as well as the frequency of interaction with the learners and among the learners are part of the environment. Silence is important because each learner may be working on a different activity. With silence or very soft voices, those who are working together do not interrupt other learners in the room. The teacher is to observe the learners and assist them, if the learner requests help from the teacher. Learners also have the option to request assistance from other learners who have experience with the task.

Gattegno’s Silent Way places the teacher in the position of observer and aid. Similar to the Montessori Method, the teacher visually, aurally and kinesthetically introduces the learners to the new vocabulary needed to communicate. After the teacher has done this, the learners use the new vocabulary to communicate among themselves. The teacher is present to assist when no learners in the group are able to assist the speaker.

Learners vary in their needs for quiet and noise tolerance, and require the teacher to be sensitive to these needs and make accommodations for them. However, this may not be possible in all classrooms; thus, quiet time needs to be built into the activities of the lesson. Although, most have adjusted to a variety of noise levels throughout their

lives and work situations, their needs can be completely opposite when learning a new language.

Noise levels in all classrooms vary depending upon the activities and the location of the classroom. Noise in the classroom can have different effects on learners. Noise in a factory site is an element that is not controlled by the teacher. In the factories in which I taught, noise from the machinery would occasionally be loud enough to halt a discussion or presentation. However, the adult ESL learners at these sites made quick adjustment, resulting in the interruption not becoming a distraction. The presentation or discussion would pause until the outside noise stopped; then the presentation or discussion would resume.

I used music at a low volume to help the learners block out the factory noise when they were working in small groups and individually as well as playing music for them when they arrived for class. Music within a classroom is important to Jensen's brain-based learning and it also is an element that can be found in some Montessori classrooms. During quiet individual work time "appropriate music is played" (Coe, 1992, p. 251). The type of music is not discussed by Coe and there are no suggestions for any music in a Montessori classroom. Playing music offered the additional advantage of separating the factory work area from the classroom setting.

It was difficult to select the appropriate music because of the varied tastes of the learners. Some of the variables that need to be taken into consideration when selecting music in an ESL class include: countries of origin, music styles, instruments, and the different languages and dialects. Thus, Jensen advises "the best results will be achieved by experimenting with your particular group of learners" (2000, p. 69). My students said

that they had no particular preference, which allowed for a variety of music to be played. This included music from Puerto Rico, Greece, Mexico, and French from Québec, as well as music from the United States. The music selected did not include heavy metal or rap because these genres seem to be too distracting for maximum learning to occur. This was successful, based on the feedback I received from the learners.

The use of music in the classroom, regardless of the volume, could be considered merely noise by some learners. However, Georgi Lozanov suggested that music was a learning channel that learners had available to them to help them experience an atmosphere that removed the stress and anxiety associated with learning a new language. The relaxed atmosphere that is created by the Baroque music, however, may be too relaxed for some learners. The time of day will also affect the learners who are listening to the music. This style of music after lunch or mid-afternoon may put the learners in too relaxed state to enable them to concentrate on the lesson.

Jensen encourages the use of music in the classroom as a background element because he, like Lozanov, found that music affects learners. He states that ambient music affects learners “depending on the type of music played, you can also use it to help learners cool down, warm up, relax, mark an important moment or occasion, or to get organized” (Jensen, 2000, p. 61). Because there is no ideal music for all classrooms, the teacher needs to experiment with different music genres and instrumentation to find the best type for the particular class.

3.3.2 Lighting

Lighting in traditional classrooms and most public buildings is the fluorescent kind. However, this type of lighting is stressful to many people, whether children or

adults (Jensen, 2000). Jensen presents the results of a study by Wayne London in his book *Brain-Based Learning*. In the study, the fluorescent lighting was replaced with “Vitalite full-spectrum lighting (simulating natural light),” resulting in “65 percent fewer days” of absences than with the standard fluorescent lights (Jensen, 2000, p. 60). He quotes Rita Dunn and associates, ““many students relax and focus better in low-light situations”” (2000, p. 61). An incandescent lamp can help soften the light and the atmosphere.

Jensen concludes that “Soft, natural lighting is best for learning. Provide a variety of lighting types in your room, and give learners say in their seating choices” (2000, p. 61). I use natural daylight and an incandescent lamp in my office because of the more relaxed feeling when compared with the fluorescent overhead lights. Most classrooms have standard fluorescent lighting, which learners and teachers accept because they have no control over the lighting type.

3.3.3 Temperature

Temperature is the next variable in Jensen’s flexible environment. This variable is important because it has the ability to affect learning in either a positive or negative manner. If learners are too warm they will react similarly to a study by the U.S. Defense Department. Jensen refers to this study reporting the results, “that heat stress dramatically lowered scores in both intellectual and physical tasks [. . .] In combat tests [. . .] high temperatures were responsible for decreases in performance requiring accuracy, speed, dexterity, and physical acuity” (Jensen, 2000, p. 64). However, the opposite can be true as well: if the environment is too cold, learners may find it difficult to function. Finding the optimal temperature for a classroom can be challenging, because the teacher

may not be able to adjust the temperature. However, Jensen suggests that the optimal temperature is seventy degrees, and that adjustments may have to be made from that point, if possible.

Most of the classrooms in which I have taught did not have an adjustable thermostat, and the temperature frequently inspired a discussion among students. There were those who liked it and others who wanted it cooler or warmer. Thus, it may be unrealistic to expect to find an ideal temperature, especially for students from varied climates.

3.3.4 Furniture and Seating

Furniture in a classroom is something that is not generally discussed in the ESL literature. However, the importance of furniture is one feature emphasized by Georgi Lozanov, Maria Montessori and Eric Jensen. All of these educators have ideas about how furniture may affect learners.

In fact, furniture is an important feature of the Suggestopedia approach by Lozanov. He includes comfortable arm chairs as part of the environment, which combined with Baroque music, he feels creates the relaxed environment learners need for maximum learning.

Furniture is also important in Montessori schools. Wentworth describes the furniture in the classroom as “desks and chairs varying according to the children’s sizes” (Wentworth, 1999, p. 19). In the Montessori school in Avilla, IN, the furniture in the classrooms consisted of appropriately sized chairs that were placed around appropriately sized tables. Other furniture, such as the shelving units with trays for activity materials, was also sized for the learners. There was no adult sized furniture in the elementary

classrooms.

Jensen suggests to “allow learners to change seats often. Provide choice in type of seating and be open to restructuring chair and desk arrangements to improve the environment” (Jensen, 2000, p. 117). Traditional classroom setups have the desks in rows. This type of arrangement does not encourage any discussion as a group and may give the learners a sense that there is no freedom in the class. Other arrangements may offer a new perspective to the learners. With circle or U shaped seating arrangements, the learners are placed in a less formal setting and can participate in discussions more easily, because they are able to see who is speaking and can respond directly to them. Eye contact is easier to establish as well as observation of facial expressions, which aid in communication.

My classes in factories met in a variety of areas, ranging from a conference room with tables and comfortable chairs to a section of the eating area with benches at tables within three feet from vending machines. Meeting in the eating area did not create a comfortable atmosphere for learning. The feeling that the learners were still at work and not in a class could not be changed because of the constant interruptions from other workers. In other locations, the room was large enough for tables and chairs to be arranged in several different configurations for the learners. The room arrangement that encouraged the greatest communication between the learners was a U shape. This shape also allowed me to circulate and to assist learners as needed. The conference room with comfortable chairs around a large table also encouraged communication between the learners. ESL learners who have not spent much time in classrooms in their native country may be uncomfortable in any classroom so adjustments to the seating

arrangement will help them to feel more comfortable.

3.3.5 People

Jensen's philosophy and discussion of the learning styles relate to some previous educators' methods. For example, building community is important to Gattegno, as well as to Jensen, who states that teachers need to be "attentive to individual differences and community building" (Jensen, 2009). Jensen writes that all learners are different, but that each learner has something unique to contribute. Yet, within all of these differences there are similarities that can be used to bind a group into a community. This was seen in the ESL classes that I taught in factories. The class members were from Mexico, Puerto Rico and Yemen; yet, they all had several things in common. Most were parents with children in school and at home. All of them worked in the same place, but had different responsibilities.

The learners in Gattegno's Silent Way build a community because they are encouraged to work together to solve the problems of communication that arise. In contrast, the Montessori Method stresses individual work. This is not to say that partner or group work is not permitted in Montessori, it is. However, the progress of each learner is recorded on each individual learner's planning sheet, which has been created by the learner and the teacher, based on the learner's interests and abilities.

Curran's Counseling-Learning or Community Language Learning approach is based on the building of a community in the classroom. The community that results is a comfortable atmosphere in which ESL learners may be more willing than otherwise to take the risks needed to increase their language skills. The community becomes a

support group which can be especially beneficial for those ESL learners with low levels of education in their own language.

Jensen's brain-based learning approach also encourages partner and group work for all activities. This creates a community of learners who depend on each other because the atmosphere is safe and anxiety is reduced and a pleasant environment has been established.

3.4 Structured Environment

This context is for learners who like to have structure in their environment. "They have very particular needs for learning and minimal tolerance for variation. They require more certainty and structure. Emphasizes rule, conformity, and authority" (Jensen, 2000, p. 141). Many of the learners in ESL classes attended schools in their home countries with very strict rules and were taught that the teacher is the ultimate authority in the classroom. However, this style is not usually used in ESL classrooms in the United States because it does not create an atmosphere conducive to conversation and the free exchange of thought. The learners in the ESL classrooms at the factory sites where I taught had varying degrees of formal education and most of them had come from a structured classroom environment. However, due to the topics the factory management requested to be covered in the classroom, the environment could not be as structured as the learners were familiar with. The learners were able to make the transition to a less structured environment through partner and group work.

Montessori classrooms have a structured environment, but not with the same features of the structured classroom Jensen describes. For Montessori "structured environment" refers to the classroom and its contents. In the Montessori classroom,

everything has a place, and objects the students use in learning activities are stored in trays. Students take the object or tray with which they are working to a table or other locations in the classroom. After completing the task, the learner is to put everything back into the tray neatly and return the tray to its appropriate location in the room so that the next learner is able to find and use it. Rules exist in the Montessori classroom; everyone has to wait their turn to use an object or tray. The teacher's role in the Montessori classroom differs from others in that the "teacher acts as the keeper of the prepared environment" (Hainstock, Revised Edition 1997, p. 85). In adult ESL classrooms, the orderliness of the Montessori Method can be used so that learners are able to locate materials as needed.

Montessori does emphasize rules which the learners follow when using the materials in the classroom and this fulfills the need of students who want a structured environment in brain-based learning and may be used in adult ESL classrooms. In the Montessori Method, the teacher is not the authority figure as seen in traditional classrooms; however, the teacher does have authority and this is seen when presenting new material or working with a group of learners. Thus, this aspect of the Montessori Method would fit into an adult ESL classroom. For ESL learners who have little or no education in their native language, the presentation of new material using the Montessori Method may be the most beneficial.

Asher is another language learning theorist who uses considerable teacher-generated structure in his TPR approach as the learners are following and performing the movements made by the teacher. Gattegno begins teaching using a very structured style through the introduction of language using the Cuisinaire rods. The class becomes less

controlled after the learners begin to develop vocabulary.

3.5 Independent

Jensen describes the learner who prefers the independent context as a loner. “This style learner prefers to learn alone. They can learn with others, but generally not as effectively” (Jensen, 2000, p. 141). In many of today’s schools, lessons accommodate this style of learner. However, working with others is encouraged in some class settings, such as biology and other science labs. In order to offer the learner the opportunity to help him/her learn under the most favorable conditions for the brain, lessons need to be created which offer independent work.

Montessori schools offer learners the independent learning variable of brain-based learning. “Montessori’s prepared learning environment, with its focus on self-selection and independence within a community of learners is designed to foster autonomy rather than heteronomy” (Loeffler M. H., 1992, p. 103). This was confirmed at the Montessori school in which I observed. In all of the classrooms there were learners working alone with a tray or on another educational activity. The other learners in the class did not disturb them or attempt to engage them in conversation.

In one classroom, two learners were working independently writing sentences. They were sharing a table, but not aiding each other in any way. Thus, “the importance of individual work in the Montessori environment simply reflects the view that children are unique individuals with different strengths, interests, and rates of growth” (Loeffler M. H., 1992). Working independently is encouraged by the teacher and space is made available within the classroom for this to occur, whether it is at a small table for only one learner or at a larger table that can seat up to four learners. However, if the learner who

is working alone needs or wants help, help is available whether it is from the teacher, assistant or another learner in the classroom.

Adults may work alone, with a partner, or in groups of varying sizes. Offering activities with flexibility for completing a task alone encourages the independence adults are accustomed to. ESL learners with low levels of education in their native language may be able to work alone using the Function of Words Chart of the Montessori Method. However, learners with little or no education in their native language need to feel assured that help is available whenever it is needed.

3.6 Dependent

Dependent learners prefer “to work in pairs, groups, and teams. They can learn alone, but generally not as effectively. They are most focused in a busy, interactive environment, in which interpersonal relationships are valued and encouraged” (Jensen, 2000, p. 141). A dependent learner is the opposite of the independent learner.

This learner does well working with others whether on big projects or small assignments. An example of this is given by Jurewicz (1989) who created and set up a hologram puzzle manipulation display for adults and children at the Maine Coast Artists Gallery in Rockport, Maine. She had children sit at the puzzles and explore all of the possibilities without detailed instruction. Some of the children did not request any instruction, but experimented with the puzzle pieces and created their own puzzles. The adults required greater explanations and assistance from the demonstrator in order to solve the hologram puzzles. Jurewicz writes, “By the end of the day, one side of the table was for children readily in the process of self-discovery and the other side was for many of the parents who needed complex verbal instruction in order to play with the puzzles”

(Jurewicz, 1989, p. 408).

3.7 Interdependent

“This style learner likes to help others learn *and* works well alone. Their feeling of success is linked to the success of the group” (Jensen, 2000, p. 141). This type of learner is able to help others learn, which may be through reciprocal teaching, and flexible grouping such as in pairs, triads, and larger groups (Jensen, 2006).

Reciprocal teaching is similar to pair work, but differs in that the learners are not doing co-learning or investigating a problem to solve; they are assuming the role of teacher, one to the other. The example for reciprocal teaching by Jensen is for foreign language classrooms. In the situation he describes, a learner of one language is used to teach his native language to the other learner. In other words, if the class is a Spanish class, then a native Spanish speaker who is learning English would be brought into the classroom to work with another learner learning Spanish, and that student in turn would help the native Spanish speaker learn the language of the country in which they both are currently living. Thus, Learner 1 (native Spanish speaker) is teaching Learner 2 (native English Speaker) Spanish while Learner 2 is teaching Learner 1 English. This can also be done with two learners in the same classroom with differing language proficiencies. One learner may be better in grammar, but not vocabulary. By using reciprocal teaching, one learner can help the other learner increase their abilities in the weaker area.

Flexible grouping gives the teacher and the learners a choice in the number of members for a group. This may largely depend on the number of learners in a class and the space available in which the groups have to collaborate. Other variables include the subject being studied, the interests of the learners, and their ability to work together.

Some learners work better in triads or pairs; thus, placing them in a larger group would make it difficult for them to focus. The emotional aspect of grouping must be taken into consideration when creating pairs or groups. It is also important to note that this is not a constant variable because preferences may change for individuals throughout the day.

Montessori's goal is for learning to be "viewed as a transactional process that affirms collaboration and community; participants teach and learn from one another. This socio-cultural approach to learning explains why Montessori is so adaptable" (Barron, 1992, p. 268). This is a good description of reciprocal teaching and group work. In the Montessori school, I observed learners working in all of the social groupings described by Jensen as well as alone, which fulfills the interdependent learner's style of learning.

Having members of the class participating in teaching other members is one that can be used with ESL learners as well because they may have strengths in different areas and be able to help each other. Materials can be divided up so that each member is able to research a topic and present their findings to their group and help those members understand the material. Through doing this, each member is valued and the interpersonal aspects of brain-based learning are addressed with flexible groupings.

Some other language learning methods that include success linked to a group are The Silent Way, Community Language Learning, and Suggestopedia. All of these approaches encourage the group to work together in gaining language skills. This is important for ESL learners because they can learn to depend on each other to achieve the goal of communication in the new language. One way to do this is to have groups of varying sizes in the class create conversations and present them to the rest of the class.

3.8 Relationship Driven

This preference is for the learner who “needs to *like* the presenter. *Who* delivers the information is more important than *what* is presented. This learner needs to develop a relationship of trust and credibility, and respect with the instructor *before* learning is maximized” (Jensen, 2000, p. 141). An example supporting this is made by H. Douglas Brown, who writes about a study conducted by Guiora and his colleagues on “the effect of Valium on pronunciation of a second language [. . .] Guiora and his colleagues hypothesized that various dosages of a chemical relaxant would have a similar effect on subjects’ pronunciation performance” (Brown, 2007, p. 159). However, this was not supported. Rather, what was discovered was who the tester was “made a significant difference” (Brown, 2007, p. 159). The positive, relaxed relationship between the tester and the learners was reflected in their pronunciation.

Another example is from one of my classes at a factory site. The learners attended because the union they belonged to agreed to pay them for their time in the ESL class, but the classroom relationships developed into supportive and congenial ones. I believe that this sense of community contributed to the students’ success.

3.9 Content Driven

Some learners are interested in the subject matter and the presenter is simply viewed as an information vessel. “This style learner prefers valuable content. *What* is presented is more important than *who* delivers it. Even if the learner dislikes the teacher, learning continues” (Jensen, 2000, p. 141). Learners who are content driven include learners who have “instrumental orientation” (Brown, 2007, p. 170). These learners want to learn English “as a means for attaining instrumental goals: furthering a career, reading

technical material, and so forth” (Brown, 2007, p. 170). This is the attitude of many ESL learners who come to class to improve their English skills.

If the instructor is not excited about the material, it makes it more difficult to present material to learners. It is not important that the learners like the instructor personally, but that the learners become interested in the new material, and one way to foster this is through enthusiasm on the part of the instructor.

4 Discussion

The following discussion includes some of the Montessori Method’s materials and their possible uses with adaptations for adult ESL learners who have little or no education in their native language, as well as those ESL learners who may have a learning disability.

The first step in learning to read in the Montessori Method is made through the use of sandpaper letters. Most adult ESL learners would not need to use these; however, those learners who have no reading skills or no education in their own language, or whose native language is written using a different writing system may benefit from using sandpaper letters with modifications.

Sandpaper letters are cut out of wood and have sandpaper applied to one side, which allows learners to feel the shape of the letter. Montessori writes that the learner will be able to trace the letters

“*with closed eyes*, letting the sandpaper lead them in following the form which they do not see. Thus, the perception will be established by the direct muscular-tactile sensation of the letter. In other words, it is no longer the visual image of the letter, but the *tactile sensation*, which guides the hand of the child in these movements, which thus become fixed in the muscular memory,” (Montessori, 2004, p. 208).

I observed learners using this at the Oak Farm School with success in remembering the letters. The teacher would make the sound of the letter and the learner would find the letter and trace it and make the sound of the letter at the same time. Adult ESL learners with learning disabilities may benefit because of the muscular memory that can be made on the muscles through tracing the sandpaper letters.

Using the moveable alphabet is the next step in the Montessori Method. ESL learners who have low reading skills in any language may benefit from using this alphabet. The moveable alphabet is in a box with compartments sized to hold each particular letter. The letters are color coded, with the consonants in red and the vowels in blue. The moveable alphabet differs from the sandpaper letters because it is made of smooth plastic molded in color or painted finished wood. This change in tactile sensation is a kinesthetic signal to the learners that they have progressed to the next step in learning to read and write.

The teacher at the Oak Farm School used this alphabet in two ways. The first way was by saying words and having the learner find the letters from the moveable alphabet box. The second way was to have the learner find the letters to spell the name of objects.

ESL learners who have low levels of education in their native language and those ESL learners whose native languages use a different writing system may be helped by using this alphabet. It could also be used with learners who have some learning disabilities and have trouble with letter distinctions or who are just beginning to learn to read. These specific conditions in ESL learners require special methods and the Montessori Method's moveable alphabet fills the need. Through the use of an alphabet in two colors, the learners are using this kinesthetic input and the color as different channels

in learning their new language.

Reading using objects or realia in the early education Montessori classroom is begun while the learner is working with the moveable alphabet. In this case, learners at the Oak Farm School are shown objects such as farm animals and miniature school or household objects and the learners or teachers say the word for each. Then the learner searches for the letter according to the sound it makes in each of the words. After the words are completed and the object named is placed above the orthographic representation, the learner has the opportunity to identify the object by sight and by the letters.

Adult ESL learners need help remembering the name of objects, as well as reading the word for the object, whether in the workforce or in daily life and this Montessori Method fills that need. Students are able to use more channels to learn if they are able to see and touch the object. Through sight and manipulation of the object, the learner is facilitating retention of both the name and the spelling of the word for the object. The need for this has been recognized by many theorists in TESOL; however, in my experience, it is not a common practice in adult ESL classrooms. Some reasons for this may be that teachers feel that it is a childish practice or that teachers do not have enough space to carry all of the objects from one location to another because ESL teachers typically go from one location to another to teach. This was true for me because I taught in factories which were located in different cities and each had different needs for the ESL learners. The amount of money available from the program for the purchase of objects must also be taken into consideration.

Using real objects with adult ESL learners helps them to increase vocabulary and

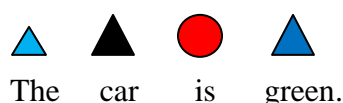
communication skills. The learners are able to hold and describe the object while learning its name. Relevant objects from different aspects of adult ESL learners lives can be brought into the classroom which will increase the learners' vocabularies. I was able to make some adaptations to carrying objects by using pictures taken from the factory floor and by having the factory provide as many objects as possible.

For the next step in reading in the Montessori class I observed, cards with words only were brought out for use with the picture only cards. The learner would read the word on the card and place it with the corresponding picture. The learner was using motion in pairing these together. This kinesthetic action, along with the picture card and printed word, offer three channels for learning. These picture card sets are color coded and allow the learner to work alone, only requiring teacher assistance on the correctness of the completed task.

Adult ESL classes for learners with little or no education in their native language could use this method with various pictures and word cards from their work site to increase their work vocabulary as well as the reading and writing skills needed for success in their workplace. Identification of objects by picture and then matching the word to the corresponding picture allows the learner to work independently or with a partner. Again, pictures of objects relevant to the ESL learners' lives can be obtained and picture and word card sets can be created for their use. These pictures could include family, work, and other social aspects of the community that interest the learners.

Another feature that can be used from the Montessori Method is the Functions of Words Chart in Appendix 1. Beginning readers do not need to be able to name the functions of words, but they do need to know sentence structure itself. Adult ESL

learners want to be able to write grammatically correct sentences. This poses the question of how much explicit metalanguage about grammar beginners need to learn. I believe that ESL learners who have low levels of education do not need to know right away the names of all of the word classes and other grammatical terms. However, knowing some basics such as “action word,” “state word” and “name of object” as well as “word that describes” can be helpful in directing students to monitor for problem areas. For example, ESL learners who are native speakers of Chinese, Thai, Russian and Arabic may omit the verb in a sentence such as “The car is green.” The teacher can create such sample sentences using the symbols from Montessori’s chart for learners to use. The learners refer to the chart to insure that they have all of the elements of a properly structured sentence after writing and before presenting the sentence to the teacher for approval. A sample would look like this:



If a student has omitted the “be” verb in this type of sentence, the teacher can indicate the omission by pointing to the symbol for the verb, allowing the student to experience the omission problem in a very concrete way, and to think about the form of verb needed.

Manipulatives can also be used for possible sound sequences in English words. While researching the Montessori Method, the author found a Montessori game called *Ends ‘N Blends* (see Appendix 4), which meets many of Jensen’s brain-based contexts. The game is played by two learners whose goal is to form words from the cards and to place those pieces on the appropriate blend space on the game board. The game board

has spaces with the beginning letter blends and the remaining letters of the word formed. The players form the word from the miniature cards they take when it is their turn. The player earns one point for each word. The player to reach fifteen points first is the winner.

5. Conclusion

Jensen and other ESL theorists have written about the relationships among learners and the relationships between the learners and the teacher. These relationships form the community that is important in his philosophy of education. Without a community, the context variables would not be met, resulting, in Jensen's view, in an atmosphere where the brain would not be receiving the stimulus required for optimal learning to occur. Since human beings are part of multiple communities including work, and the neighborhood in which they live, it is natural that a community should exist in their ESL classroom.

The teacher is the one who must foster by example the relationships expected between the learners. The Montessori Method offers some tools to do this. The Montessori Method has some features for young learners which can be modified for adult ESL learners. These include the use of the sandpaper letters and the moveable alphabet. The use of the Functions of Words chart with its color and shapes for easy identification of word classes and work with a partner for reading or writing or grammar is another of these tools. This chart offers ESL learners the opportunity to analyze the written word for correct sentence structure in English. This can help students learn to create sentences in English that will convey the meaning they want.













Another technique is playing games. The Montessori game of *Ends'N Blends* is a

community building tool because the game requires the partners to collaborate to make words. *Hot Seat* is another game that builds community, as well as vocabulary, because the learners work in teams and learn how to cooperate with many learners.














The modifications and suggestions given in this paper demonstrate that the Montessori Method can be adapted to meet the needs of adult ESL learners who have little or no education in their native language. Tracing the sandpaper letters and using the moveable alphabet to spell the names of objects are two of the ways these adult ESL learners can use the Montessori Method in acquiring the new language. Vocabulary building coupled with the spelling of the item aid the adult ESL learner in their work environment because they may require less assistance in performing their job and communicate more effectively with coworkers. I believe that Jensen's brain-based learning approach can greatly facilitate adult ESL learning.


It would be useful to have empirical testing with subjects and control groups to see whether the techniques discussed have any significant effects.


Appendix 1


Functions of Words in Montessori**Symbols used in the lower level:**Noun – Verb – Article – Adjective - Conjunction - **Symbols used in the intermediate level:**Noun – Verb – Article – Adjective - Conjunction - Preposition – Adverb - Pronoun - 

Symbols used in the upper level:


Noun –						
	common	proper	collective	abstract		
Verb –						
	transitive	intransitive	linking	gerund	participle	infinitive
						
	infinitive as adjective		infinitive as noun		infinitive as adverb	

Article – 

Adjective - 

Conjunction - 

Preposition – 

Adverb - 

Pronoun - 

Appendix 2

RE: Philosophy

From: **Eric Jensen** (eric@jlcbrain.com)
 Sent: Thu 1/29/09 12:35 PM
 To: Helen Bowersock (habowe@hotmail.com)
 Hi

I'm a former teacher with a real love of learning. Here is his educational philosophy:

- school ought to be all about enriching every student, every day.
- strong supporter of public education as a way to communicate values
- blend the science of teaching with the reality of today's world
- be attentive to individual differences and community building
- be student-centered learning is better than teacher-centered learning
- constructivism is favored over mindless factual accumulation
- favor better depth over breadth of knowledge; make learning to be engaging, challenging, vigorous and integrated.
- All learning ought to be developmentally appropriate
- the arts should not be a path only for the alternative learner or those who would otherwise fail, any more than math is an easy path for those who can't do arts.
- movement and physical education ought to be a part of all student's education.
- challenging work in all the disciplines (arts as one of them)
- use regular, accurate and purposeful assessment and strong standards in learning.
- include students of all races, religion and income levels and give a challenging, fair and deep curriculum
- enrichment is favored across the board, for all learners
- the role of teachers is to be mediators, coaches and mentors who succeed via relationship and mutual respect, not based on position, content or authority
- oppose strong use of computers for younger children; they get plenty later
- foster ethical, fair-minded, disciplined, cooperative, thoughtful, trusting, considerate, realistic, problem-solving creative citizens.
- support vocation and career/tech ed curriculum options for all
- the role of highly qualified educational leaders who are held to high standards, but are given the control and resources and reach demanding goals.

Gratefully, Eric Jensen

-----Original Message-----

From: Helen Bowersock <habowe@hotmail.com>
 Sent: Thu, 29 Jan 2009 12:16:38 -0500
 Subject: Philosophy

Hello Eric,

My name is Eleni Bowersock and I am a graduate student at Ball State University in Muncie, IN. I am working on getting my Master's degree in TESOL (Teaching English to Speakers of Other Languages). My Master's paper is looking at the Montessori Method's treatment and teaching system for writing, grammar and reading and checking to see if it meets the requirements for brain-based learning per the material you have written. Then, I am looking at using these two methods for adult English language learners. I know that the brain-based learning and teaching methods you have outlined work for adults because I have implemented them in my classrooms. However, using Montessori materials is something I had not done.

The reason I am writing is that I need to incorporate your philosophy of brain-based learning. I am able to glean what I think is your philosophy from your books; however, I would greatly appreciate it if you would please send me an email with your philosophy. There is nothing better than getting the philosophy directly from the source, which is you!

Thank you for taking the time to read my email. Your help and response are greatly appreciated.

Eleni

Windows Live™ Hotmail®:...more than just e-mail.

http://windowslive.com/explore?ocid=TXT_TAGLM_WL_t2_hm_justgotbetter_explore_012009

***Note:** No changes or additions were made to this email. It is exactly as it was received by author.

Appendix 3

Hot Seat**Level**

Beginner to advanced.

Skills Practised

Speaking and listening.

Time

Flexible.

Preparation

1. Prepare a list of five to nine words your class has recently learned.
2. Draw a scoring table on the board, like this:

Team A	Team B

How it Works

1. Ask your students to form two teams and have them move their chairs forward to form two groups facing the board. After explaining the game and modelling the roles if necessary, ask for one player from each team to move his or her chair forward again and turn it to face his or her group. These players then sit in their chairs (now 'hot seats') with their backs to the board.
2. Write the first word on the board, making sure the players in the 'hot seats' can't see it. After you say 'Go!', the members of each team try to elicit this word from their team-member in the 'hot seat' without saying the word or giving any clues as to its spelling (such as the first letter). For example, if the word is 'vitamins', players could make statements such as 'We need lots of these in our food' or ask leading questions such as 'What does fruit have a lot of?'. The team whose 'hot seat' player first says the target word wins a point.
3. The two players in the 'hot seats' then swap seats with another member of their

respective teams. After writing the second word on the board, say 'Go!' again, and so on. The game continues until all the words have been used, with the team having the most points at the end of the game winning.

Notes:

- If neither of the players in the 'hot seats' has stated the word within a reasonable length of time, move on to the next word without having the players swap seats.
- It's a good idea to tell the players the total number of words you intend to write on the board before play begins. This allows players to gauge their team's chances of winning as the game progresses.

Variations: There are many possible variations on this game. You could write the names of famous people instead of recently-learned words, or movie titles, song titles, countries, famous places, etc.

For a small class (3 - 6 students): Set up just one 'hot seat' and have a player write any word on the board. The other players try to elicit this word from the player in the 'hot seat'. After this player has had a chance to guess 2 or 3 different words, players alternate roles as they wish. This variation need not involve scoring.

- From the website: www.teflgames.com/games.html

Sheltered Instruction Observation Protocol Lesson Plan

Date: _____ Grade/Class/Subject: Reading

Unit/Theme: Vocabulary building Standards: AE.L 2 Follow complex multi-step oral instructions

AE.S4 Use collaborative skills in group

Content Objective(s): Work with a group using the new English words from a lesson and know their meanings.

Language Objectives: Increase vocabulary through the use of an alternate word or the use of the definition of a word. Cooperate with a group in the new language.

Key Vocabulary: List of words from the reading material







Supplemental Materials: Game: *Hot Seat* instructions; list of vocabulary words and their definitions either in the source material or from the learners own vocabulary list with definitions for the unit being worked on; two stacks of cards with the vocabulary words written on them.

Lesson Sequence: Learners bring the reading material or their own vocabulary list with definitions. Introduce the game and go through the directions with the learners. Have the class divide up into two teams and decide who is going to be in the hot seat guessing the first word and the order for players who will be next. The instructor is the score keeper and the person who writes the word the learner in the hot seat has selected, from the stack of vocabulary word cards, on the board.

Reflection: The class enjoyed the game and found it challenging because many of them wanted to use the vocabulary word in the definition. The class thought the game provided the motivation needed to learn the vocabulary. No one wanted to be on the team that did not have the most points. Their competitive spirit was evident through the enthusiasm and encouragement they were giving to each other in their teams. Their collaborative skills were increased as they discussed the meaning trying to find a new way of saying it for the person in the hot seat to call out the correct word.

Appendix 4

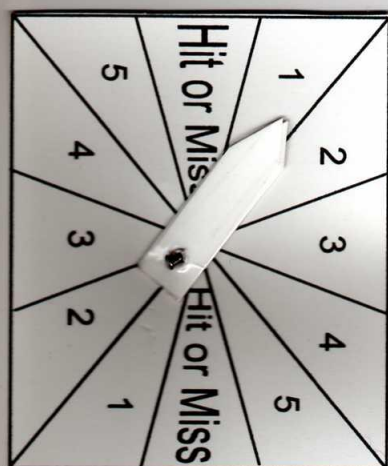
Game Ends'N Blends

ack		all			in		
op			eed			eat	
	an			ear			
ar		ap			ow		
ill			ank			ain	
	et			ell			
ate		ick			ew		
ot			ock			ay	
	ip			ail			
ing		ook			at		
ight			ake			ame	

Take one end'n blend
card from each player.
Spin again.

Take one end'n blend.
Spin again.

Return one end'n blend.



Take one end'n blend
card from each player.
Spin again.

Return two ends'n
blends.

ain

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Sheltered Instruction Observation Protocol Lesson Plan

Date: _____ Grade/Class/Subject: Writing

Unit/Theme: Vocabulary building Standards: AE.L 2 Follow complex multi-step oral instruction

AE.S4 Use collaborative skills in group

Content Objective(s): Work with a partner to create words using beginning blends of English words and add endings to create English words and to know or learn new words and their meanings.

Language Objectives: Creating English words from parts given. Increase vocabulary using the new words created. Being able to communicate with a partner in the new language and collaborate to reach a conclusion on the validity of a word and being able to use a dictionary to verify the word and know the meaning of the word.

Key Vocabulary: spinner, unoccupied

Supplemental Materials: Game: *Ends 'n Blends* instructions, game boards, game pieces, spinner, paper, pencil, dictionary or electronic translator.

Lesson Sequence: Distribute all of the materials needed to play the game. Introduce the game and go through the directions with the learners. Model use of the spinner and the assembly of words and their placement on the game board. Show how to keep score.

Reflection: For some of the learners in the writing class, the hardest part was the spelling and pronunciation of some of the created words. An example includes the words sweet vs. sweat. There also were comments expressed that the learners could create words but did not know the meanings for those words. Some of the comments from the grammar class include: fun, learn new words, and cooperate with a partner. The learners added

that the game is not for beginning learners because of the complexity of creating words from the materials available in the game.

I polled the class for any changes that they thought would improve the game. Both classes had suggestions for changes. It was suggested that the Hit or Miss Cards could have different messages on them. Some suggestions for these included having emotions on them, such as: smile; dance for ten seconds; walk around the room; or miss one turn.

Another learner suggested that the players be allowed to use more than two cards to make words and also receive two points instead of the one point granted per word. Several learners in the writing class suggested that they be allowed to use a translator or a dictionary to help them decide if the word created is a real word. One pair of learners in the second class did use a dictionary and translator. This pair used a computer to test the created word. This was successful; however, the meaning of the word was not always clear or understood by the learners and required direct input from the instructor or author.

There were times that using the computer was beneficial for the players while other learners felt that the use of a dictionary was helpful, but to understand the meaning of the word as it is used in everyday speech was not clearly defined in the dictionary. This resulted in the need for a native or native-like speaker to be present. The cooperation with a partner was a strong point and the learners felt that working with a speaker from a different language group was beneficial because it required the use of the new language; thus, eliminating the temptation to rely on the native language.

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